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**Subject:** EPA Comments on RTC's for the Radiological characterization Surveys Work Plan Parcel F Structures

Dear Leslie,

I apologize for the delay in submitting EPA comments. Based on a review of the Response to Comments (RTCs) on the Draft *Radiological Characterization Surveys Work Plan, Parcel F Structures*, Hunters Point Naval Shipyard, San Francisco, California, July 2018 ("Work Plan"), the responses address the EPA comments, with the exception of the first two general comments, as discussed below.

**Evaluation of the Response to General Comment 1:** Currently, the Work Plan classifies Parcel F structures as Class 3 survey units and has proposed conducting radiological surveys of 25 percent (%) of these structures. The RTCs have not sufficiently justified a Class 3 designation. EPA agrees with the California Department of Public Health Specific Comment #1 on the RTCs, which lists relevant historical radiological activities and which recommends a Class 1 designation. Also, no records have established where ships from Operation Crossroads were berthed. Dry Docks 2-7 and the Gun Mole Pier are all considered radiological impacted. When the Navy surveyed onshore drydock areas adjacent to the piers and subpens, radiological devices were found. The piers removed from Parcel B were removed as potentially radiologically impacted. In addition, the response is incomplete because it does not address the potential for the presence of elevated alpha activity on outdoor metal surfaces in Parcel F due to the sequestering of Polonium 210 (Po-210) from the decay of Radium-226 (Ra-226), which has been identified on metal structures at other areas of the Hunter's Point Naval Shipyard. The response states that the time and weathering of surfaces on Parcel F would be expected to reduce levels of potential surface residual radioactivity over time; however, Po-210 may increase the alpha radioactivity on surfaces over time. However, given the identification of elevated alpha activity above the release criteria on other surfaces throughout the Hunter's Point site due to the concentration of Po-210 from the presence of Ra-226, metal structures in Parcel F should be considered potentially impacted above the remedial goal (RG) and therefore should be classified as Class 1 survey units and receive more thorough evaluation to determine if the release criteria for these surfaces has been met. Please revise the Work Plan to reclassify these survey units to Class 1 and specify that 100% gross alpha/beta surveys and smear sampling for gross alpha of metal surfaces of structures located in areas of Parcel F that may be released for public access will be conducted to ensure the RGs have been met and to identify whether any of those surfaces have elevated levels of Po-210 that may pose a safety risk to potential future receptors.

**Evaluation of the Response to General Comment 1, Section 1.0 (Introduction):** The response does not address EPA's comment that as part of the fourth Five-Year Review occurring in parallel this year, the Navy should perform updated risk evaluations of existing RGs using the current versions of the EPA's radiological risk models. These include the Preliminary Remediation Goals (PRG) Calculator for soil, the Building PRG Calculator for buildings and the Surface PRG Calculator for surfaces. The new work performed under this Work Plan should use cleanup criteria that reflect findings of the updated risk evaluations to ensure the protectiveness of the cleanup. Please revise the Work Plan include the results of the risk evaluation of current RGs and to include risk analysis (or refer to such analysis in the Five Year Review or other document) using the current version of the relevant PRG Calculator(s) for the structures to demonstrate that planned cleanup will protect any potential receptor to the CERCLA acceptable Excess Lifetime Cancer risk range of 10E-06 to 10E-04 using exposure pathways and scenarios specific to each structure.

Lily Lee

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